PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 26584	**FOR FURTHER ACTION**	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/IL03/00930	International filing date (*day/month/year*) 06 November 2003 (06.11.2003)	(Earliest) Priority Date (*day/month/year*) 06 November 2002 (06.11.2002)
Applicant ITAMAR MEDICAL LTD.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the Report**
   a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
   ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
   b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:
   ☐ contained in the international application in written form.
   ☐ filed together with the international application in computer readable form.
   ☐ furnished subsequently to this Authority in written form.
   ☐ furnished subsequently to this Authority in computer readable form.
   ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
   ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
2. ☐ **Certain claims were found unsearchable** (See Box I).
3. ☐ **Unity of invention is lacking** (See Box II).
4. With regard to the **title**,
   ☐ the text is approved as submitted by the applicant.
   ☒ the text has been established by this Authority to read as follows:

Please See Continuation Sheet

5. With regard to the **abstract**,
   ☐ the text is approved as submitted by the applicant.
   ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. 4
   ☐ as suggested by the applicant. ☐ None of the figures
   ☒ because the applicant failed to suggest a figure.
   ☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL03/00930

Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

A method and apparatus for improving the diagnostic performance of a probe system (30 for detecting a medical condition in a patient by sensing volume changes in a monitored body part due to pulsatile arterial blood flow in the body part, characterized in calibrating the probe system (30) for the respective measurement site according to a predetermined characteristic of the monitored body part of the patient and quantifying the arterial pulsatile volume thereat. Such calibration is described with respect to probes including: (1) a pressure sensor (63), which senses pressure changes in a compressible fluid system to which the patient's body part (e.g. finger, toe, or distal portion of a limb) is subjected, which pressure changes are convertible to volume changes in the body part due to pulsatile arterial blood volume changes therein; and (2) an optical sensor (140), which senses the optical density or transmissivity changes in the body part, which changes or also convertible to volume changes due to pulsatile arterial blood volume changes in the body part.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL03/00930

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 05/00

US CL : 600/478

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/478, 485, 500-504;

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

none

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

none

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US, 6322515, A (Goor et al) 27 November 2001, see entire document.	1-40
A	US, 5140990, A (Jones et al) 25 August 1992, see entire document.	1-40
A	US, 5,111,817, A (Clark et al) 12 May 1992, see entire document.	1-40

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

11 March 2004 (11.03.2004)

Date of mailing of the international search report

12 APR 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Robert L. Nasser

Telephone No. (703) 308-0858

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

PCT/IL03/00930

Continuation of Item 4 of the first sheet:
The title is objected to under PCT Rule 4.3 because it exceeds 7 words.

New Title: Detecting Medical Conditions with noninvasive body probes.